

CLAIMS:

1. A swash plate type variable capacity compressor to be used for a supercritical refrigerating cycle comprising : a swash plate which is disposed rotatably, a piston which is coupled with the swash plate and a cylinder which holds the piston movably, the cylinder is provided with a suction valve for sucking a refrigerant of the supercritical refrigerating cycle and a discharge valve for discharging the refrigerant, wherein:
5 the suction valve has valve bodies having flexibility attached to suction ports for sucking the refrigerant, and
10 the swash plate type variable capacity compressor has the valve bodies press-contacted in an elastically deformed state against the valve seats of the suction ports to decrease the number of rotations of the swash plate when the refrigerant is started to
15 be compressed.
2. The swash plate type variable capacity compressor according to claim 1, wherein the valve bodies have deflection of 1 mm or less when the valve bodies are fitted to the suction ports and
20 the valve bodies receive an external force of 1.8 N or less from the valve seats of the suction ports.
3. The swash plate type variable capacity compressor according to claim 1 ~~or 2~~, wherein the supercritical refrigerating cycle
25 is a refrigerating cycle for air conditioning of a car interior to be mounted in an automobile, and the swash plate type variable capacity compressor is a clutchless compressor which is coupled with a motor vehicle engine without via a clutch.